M/IB 477/64 6 October 1964 Copy ====

MEMORANDUM FOR: Chief, Defensive Systems Division, OSI

25X1A

ATTENTION:

Air Defense Branch

THROUGH:

Chief, Requirements Branch, Reconnaissance Group, CGS

FROM:

Chief, CIA/PID (NPIC)

SUBJECT:

SA-2 GUIDELINE Missiles

REFERENCES:

(a) Requirement C-SI-4-81,520 (b) CIA/PID Project C 1077-64

(c) NPIC Brief 1009/61 (Photographic Studies of GUIDELINE Missiles)

(d) M/EB 109/64 (GUIDELINE Missile Mensuration)

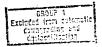
(e) Soviet Tactical Missiles (TM 30-278), dated January 1963

- 1. This memorandum is in response to your requirement dated 19 June 1964 which requests that PID (NPIC) establish whether the GUIDELINE missile deployed in Cuba is different from the current PID (NPIC) analysis of GUIDELINE.
- 2. There are four known basic versions of the SA-2 GUIDELINE missile which have been observed to date. A report on three of these versions is contained in NPIC Brief 1009/61 (Photographic Studies of GUIDELINE Missiles) and the fourth version is described in PID Memo M/FB 109/64 (GUIDELINE Missile Mensuration). The GUIDELINE observed in the 1964 Moscow May Day Parade is depicted here for purposes of comparison.

With the exception of the dark band adjacent to the mose probe on the Moscow GUIDELINE (1964 May Day Parade), no basic structural differences appear to exist between the two missiles depicted in this memo. The slight differences in mensuration can possibly be attributed to the relatively poor quality of the Cuban photos used.

In overall appearance, the GUIDELINE model depicted in this memo compares favorably with the GUIDELINE model which was seen in Budapest in An analysis of that GUIDELINE model is presented in NPIC Brief 1009/61, (Fnotographic Studies of GUIDELINE Missiles), and in TM 30-278 (Soviet Tactical Missiles). Dimensions provided by these two sources vary with each other and with the dimensions presented in this memo. These variations are shown below.

DECLASSIFICATION REVIEW by NIMA/DOD 4/11/00



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Note: Dimensions to nearest tenth of a foot.

	25X1D Cuban/Moscow	Budarest GUIDELINE Analysis in NPIC	GUIDELINE Analysis in P.I. Key-Soviet
Item of Comparison	GUIDELINE	Brief 1009/61	Tactical Missiles
Overall length	34.4 feet		
Distance between tip of nose probe and forward edge of spotler fins	3.8 feet		
Distance between tip of nose probe and forward edge of lift surfaces	12.9 fcet		
Distance between forward edge of control surfaces and rear edge of lift			
surfaces	2.1 feet		

It is not known whether these differences are due to human error involving different and/or inferior materials used in these analyses, or whether these dimensional differences actually exist.

25X1D

One other dimensional comparison with the four basic SA-2 versions can be noted. The overall length of the Prague feet, is exactly the same as the Cuban/Moscow CUIDELINE described in this memo, but in overall appearance the nose probe and spoiler fins have distinctly different configurations and dimensions.

Dimensions shown on the attached line drawings were accomplished by the Technical Intelligence Division (NPIC). 25X1A

- 3. The photo analyst on this project is who may be contacted on extension 3410 should you have any further questions concerning this project.
 - 4. This project is considered to be complete.

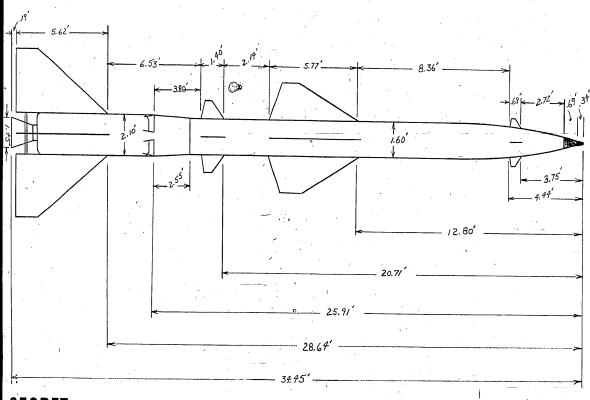
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Enclosures: Two (2) line drawings (CIA/PID/MEP-P-892/64 and P-893/64) CIA/PID/MEB-P-892/64
Attachment to M/EB 477/64

SECRET

SA-2 GUIDELINE MISSILE OBSERVED IN MOSCOW MAY DAY PARADE - 1964

ESTIMATE OF ACCURACY = 90% TO 95%



SECRET

5-14538

